

## REMARKS/ARGUMENTS

Claims 1, 3-6, 8-10, and 14 were pending and at issue in the application. By this amendment claims 1 and 6 are amended. Support for the amendments to claims 1 and 6 may be found in the specification and claims as originally filed. For example, support may be found in paragraph [0012]. No new matter is added. Thus, claims 1, 3-6, 8-10, and 14 remain pending and at issue.

### 35 U.S.C. § 103 Rejections

The applicant respectfully traverses the rejection of claims 1, 3-6, 8-10, and 14 as obvious over U.S. Patent No. 5,047,965 to Zlokovitz ("Zlokovitz") in view of Great Britain Patent Application No. GB 2,252,848 to Yonnet ("Yonnet"). To establish a *prima facie* case of obviousness, "the prior art reference (or references when combined) must teach or suggest all the claim limitations." M.P.E.P. § 2143. The cited art fails to disclose or suggest all claim limitations. Each of claims 1, 3-6, 8-10, and 14 recites, in part, a pressure loaded pilot valve system comprising a pilot valve that opens as pilot loading pressure increases, and a spring force that opposes the pilot loading pressure. Neither Zlokovitz nor Yonnet discloses or suggests a pilot valve that opens as pilot loading pressure increases, and a spring force that opposes the pilot loading pressure.

Zlokovitz discloses a microprocessor controlled gas pressure regulator having a pilot valve that is controlled, in part, by an electronically adjustable regulator valve that is under the control of a microprocessor. The electronically adjustable regulator valve supplies pressurized fluid to the pilot valve to control the position of the pilot valve and thus, the gas pressure regulator. *See* Zlokovitz abstract and col. 3, lines 28-36. However, Zlokovitz fails to disclose or suggest a pilot valve that opens as pilot loading pressure increases, and a spring force that opposes the pilot loading pressure. Rather, Zlokovitz discloses a spring force that acts in the same direction as the pilot loading pressure. For example, "the controlled downstream pressure is used to oppose the forces developed on diaphragm 23 by biasing spring 24 and by the fluid pressure of pressurized fluid received in chamber 25 by way of conduit 28." Emphasis added, *see* Zlokovitz, col. 3, lines 32-36. In other words, the fluid pressure in conduit 28 and the spring force of the biasing spring 24 work together in the same direction (i.e., to move the diaphragm 23 downward). *See* the annotated version of

The diagram illustrates a pressure control system for a gas turbine engine. Key components and their connections are as follows:

- TRANSMITTER**: Located at the top right, it is connected to the **ACTIVATED CHARCOAL VENT** and the **MAIN PRESSURE REGULATOR UNDER PILOT CONTROL** via lines 46, 47, 48, 49, and 50.
- ACTIVATED CHARCOAL VENT**: A component that provides a vent path for the system.
- MAIN PRESSURE REGULATOR UNDER PILOT CONTROL**: A central control unit that manages the pressure in the system. It includes a **MAIN INLET** (13) and a **MAIN** (17) connection.
- Pressure Regulator Assembly**: This assembly includes a **Spring Force** (25) mechanism, a **Valve** (20), and a **Pressure Sensor** (23). It is connected to the **TRANSMITTER** (46, 47, 48, 49, 50) and the **MAIN PRESSURE REGULATOR UNDER PILOT CONTROL** (16, 19, 21, 26, 27).
- Fluid Flow**: Indicated by an arrow pointing downwards from the top left, showing the direction of flow through the system.
- Other Components**: The diagram also shows a **Valve** (16) and a **Pressure Sensor** (19) connected to the **MAIN PRESSURE REGULATOR UNDER PILOT CONTROL**.

Fig. 1.

Yonnet fails to disclose a pilot valve that opens as pilot loading pressure increases, and a spring force that opposes the pilot loading pressure, nor was Yonnet cited as disclosing such an element. Yonnet discloses a gas supply pressure control apparatus including an active governor controlled by a pilot valve which is, in turn, at least partially controlled by an electronic means through two valves 56, 58. Yonnet does not teach or suggest a pilot valve that opens as pilot loading pressure increases. In fact, Yonnet teaches just the opposite. Yonnet teaches that the pilot governor 18

closes as pressure in pipeline 29 increases. *See* Yonnet, page 7, lines 2-5. As a result, Yonnet fails to disclose or suggest a pilot valve that opens as pilot loading pressure increases, and a spring force that opposes the pilot loading pressure, as is recited by each of claims 1, 3-6, 8-10, and 14.

As discussed above, neither Zlokovitz nor Yonnet discloses or suggests a pilot valve that opens as pilot loading pressure increases, and a spring force that opposes the pilot loading pressure, as is recited by each of claims 1, 3-6, 8-10, and 14. Thus, none of claims 1, 3-6, 8-10, and 14 can be rendered obvious by any combination of Zlokovitz and Yonnet. The applicant respectfully requests withdrawal of the rejection of claims 1, 3-6, 8-10, and 14.

### CONCLUSION

The applicant respectfully requests entry of the foregoing amendments and withdrawal of the rejection of claims 1, 3-6, 8-10, and 14. No fees are believed due at this time. However, if there are any other fees or refunds required, the Commissioner is directed to charge or debit Deposit Account No. 13-2855 of Marshall, Gerstein & Borun LLP. A copy of this paper is enclosed herewith.

If there are matters that can be discussed by telephone to further the prosecution of this application, the applicant respectfully requests that the examiner call its agent at the number listed below.

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Respectfully submitted,

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